UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,597	02/03/2006	Albrecht Rosenfeld	LE/se 030088US	8599
	7590 03/12/200 er & Associates	EXAMINER		
Suite B			BOEHLER, ANNE MARIE M	
707 Highway 66 East Tijeras, NM 87059			ART UNIT	PAPER NUMBER
			3611	
			MAIL DATE	DELIVERY MODE
			03/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Comments	10/567,597	ROSENFELD ET AL.
Office Action Summary	Examiner	Art Unit
	Anne Marie M. Boehler	3611
The MAILING DATE of this communicat Period for Reply	tion appears on the cover sheet wit	h the correspondence address
A SHORTENED STATUTORY PERIOD FOR WHICHEVER IS LONGER, FROM THE MAIL - Extensions of time may be available under the provisions of 3 after SIX (6) MONTHS from the mailing date of this communic - If NO period for reply is specified above, the maximum statuto - Failure to reply within the set or extended period for reply will, Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	LING DATE OF THIS COMMUNIC 7 CFR 1.136(a). In no event, however, may a re- ation. ry period will apply and will expire SIX (6) MONT by statute, cause the application to become ABA	ATION. ply be timely filed THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed of 2a) ☐ This action is FINAL . 2b) ☐ Since this application is in condition for closed in accordance with the practice in a condition for the condition of the closed in accordance with the practice in the condition of the closed in accordance with the practice in the condition of the closed in accordance with the practice in the condition of the communication(s) filed on the communication of the commun	☐ This action is non-final. allowance except for formal matte	· •
Disposition of Claims		
4) ☐ Claim(s) 14,17-20 and 22-29 is/are pen 4a) Of the above claim(s) is/are v 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 14,17-20 and 22-29 is/are reje 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction	vithdrawn from consideration.	
Application Papers		
9) The specification is objected to by the E 10) The drawing(s) filed on is/are: a) Applicant may not request that any objection Replacement drawing sheet(s) including the 11) The oath or declaration is objected to by	☐ accepted or b)☐ objected to be n to the drawing(s) be held in abeyand correction is required if the drawing(s	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for a) All b) Some * c) None of: 1. Certified copies of the priority documents. 2. Certified copies of the priority documents.	cuments have been received. cuments have been received in Ap he priority documents have been Bureau (PCT Rule 17.2(a)).	oplication No received in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	948) Paper No(s	ummary (PTO-413) /Mail Date formal Patent Application _·

Application/Control Number: 10/567,597 Page 2

Art Unit: 3611

1. Claims 17 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

It is not clear if applicant means for claim 17 to be canceled or not. Claim 17 is labeled "canceled" but it is the only canceled claim that also has all of the text of the claim provided. For the purpose of this office action, it is assumed claim 17 is pending, but clarification is required. In claim 17, applicant recites a rotary slide valve carried by the cylinder. However, claim 17 depends from claim 14 which recites a rack fixed to the cylinder in the axial direction. In the embodiment of claim 14, the valve cannot be mounted to the cylinder because the cylinder moves. Applicant has not disclosed any embodiment where the valve moves with the cylinder. It appears that in every embodiment the valve is mounted to steering housing 1 to rotate about a fixed axis. Figure 4 shows the rotary valve 30, 33, is fixed to the pinion 13, which has a fixed axis and does not move axially with the cylinder 42.

Similarly, in claim 26, applicant recites tie rods articulated to end faces of the rod. However, the embodiment currently being claimed has a movable cylinder and fixed piston rod. It would be impossible for this embodiment to operate as a steering system if the tie rods were fixed to the piston rod.

2. Claims 14, 18-20 and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosell (USPN 4,629,026).

Rosell shows a steering mechanism with a rack 30 meshing with a pinion 20 and a hydraulic servo-drive. The servo includes a rod 14, a piston 16 and a cylinder 50. The rack is fixed to the cylinder body in the axial direction such that the rack and piston rod are parallel and spaced from each other. Center take-off tie rods 61 are mounted to a central portion of the cylinder at 63. A rotary valve body 40 is connected to the pinion, as is covnentional.

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosell in view of Ozeki.

Rosell lacks an added guide rod.

Ozeki teaches the use of an added guide rod36 in order to reduce noise in the mechanism (as discussed in col. 1 of Ozeki).

It would have been obvious to one of ordinary skill in the art to provide the Rosell mechanism with an additional guide rod, as taught by Ozeki, in order to reduce noise in the system.

5. Applicant's arguments filed 1/25/2008 have been fully considered but they are not persuasive.

Applicant stated that none of the prior art of record, including the reference to Rosell (USPN 4,629,026), discloses or suggests that the rack is connected to the

Application/Control Number: 10/567,597

Page 4

Art Unit: 3611

cylinder, as recited in claim 14. the examiner disagrees. Rosell teaches a steering mechanism with a housing 10, a rack 30, and a hydraulic servo-drive having a piston/cylinder unit. The piston/cylinder unit includes a fixed piston 16 and fixed piston rod 14, and a cylinder 50 that is fixed in the axial direction to the rack 30. Connections 52 connect the ends of the rack to the cylinder so that they are relatively axially fixed, but are allowed some radial relative movement. The rack and piston rod extend along parallel axes and are spaced from each other. Therefore, he claimed invention is believed to be anticipated by Rosell.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3611

7. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Anne Marie M. Boehler whose telephone number is 571-

272-6641. The examiner can normally be reached on 7:30-5:00, Monday-Thursday,

and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Lesley Morris can be reached on 571-272-6612. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have guestions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anne Marie M Boehler/

Primary Examiner, Art Unit 3611

Anne Marie M Boehler Primary Examiner

Art Unit 3611

amb